DEPARTMENT OF TRANSPORTATION
RESEARCH AND SPECIAL PROGRAMS ADMINISTRATION
WASHINGTON, D.C. 20590

49 CFR Parts 171, 173, 174, 177

[Docket No. HM-163-D; Amdt. Nos. 171-54; 173-138; 174-38; 177-49]

Hazardous Materials Regulations; Withdrawal of Certain Bureau of Explosives Delegations of Authority

AGENCY: Materials Transportation Bureau, Research and Special Programs Administration, DOT.

ACTION: Final rule.

SUMMARY: The purpose of these amendments to the Department's Hazardous Materials Regulations is to withdraw or cancel the remaining delegations of authority to the Bureau of Explosives (B of E) in Part 173 (except for § 173.34(d) and § 173.303(a)) of 49 CFR. However, the B of E will continue to play a role in the testing of explosives and other hazardous materials for MTB. This action is being taken to conform existing programs with the purposes of the Hazardous Materials Transportation

EFFECTIVE DATE: May 19, 1980.

FOR FURTHER INFORMATION CONTACT: Darrell L. Raines, Office of Hazardous Materials Regulation, Materials Transportation Bureau, Research and Special Programs Administration, Washington, DC 20590, phone 202-472-2726.

SUPPLEMENTARY INFORMATION: On November 26, 1979, the Materials Transportation Bureau (MTB) published a Notice of Proposed Rulemaking, Docket HM-163D; Notice 79-15 (44 FR 67476) which proposed these amendments. The background and the basis for incorporating these amendments into the regulations were discussed in that notice. Interested persons were invited to give their views prior to the closing date of January 15, 1980.

The MTB received eight comments on Notice 79-15.

The main objections received were in reference to § 171.20 and § 173.86. The objections were (1) no time limitation on the approval response from the Associate Director for OE after an application for approval has been submitted, (2) no mention of an appellate review in the event that the Associate Director for OE denies an approval, and (3) the economic hardship and excessive time delay that would occur if the present authority now delegated to the Department of Defense and the Department of Energy was withdrawn.

In response to the first objection, the MTB has and will continue to rely on the expertise and recommendations of the B of E. Therefore, we do not visualize the need to incorporate a time period for the Associate Director for OE to respond to an approval request at this time. All applications received for approval will be processed as expeditiously as possible. If actual practice dictates the need for a time limit at a later date, the MTB will consider the issuance of a notice of proposed rulemaking for public comment.

In reference to the second objection, § 171.20 has been revised by adding paragraph (c) to allow any applicant to file an appeal with the Director, MTB in the same manner as provided in § 107.121 for an exemption.

The proposed changes in § 173.86 were not intended to disrupt or change the present authority delegated to the Department of Defense and the Department of Energy. Therefore, § 173.86(b) has been revised to require OE approval only on those items examined by the B of E.

Two paragraphs in Part 174 and three paragraphs in Part 177 have been revised and included in this rulemaking to coincide with similar changes made in Part 173. The changes proposed for § 173.34(d) and § 173.303(a) have been withdrawn from this rulemaking and will be republished in a separate notice of proposed rulemaking in the near future. In addition to § 173.34(d) and § 173.303(a) the MTB believes that the only remaining delegation of authority to the B of E in Parts 173, 174, 177 and 178 that has not been changed is § 177.821(e). The MTB will include these three proposed changes in the same notice.

Primary drafters of these amendments are Darrell L. Raines, Exemptions and Regulations Termination Branch, and George W. Tenley, Office of the Chief Counsel, Research and Special Programs Administration.

PART 171—GENERAL INFORMATION, REGULATIONS, AND DEFINITIONS

In consideration of the foregoing, 49 CFR Parts 171, 173, 174, and 177 are amended as follows:

1. Section 171.20 is added to read:

§ 171.20 Submission of Examination Reports.

(a) When it is required in this subchapter that the issuance of an approval by the Associate Director for OE be based on an examination by the Bureau of Explosives (or any other test facility recognized by MTB), it is the responsibility of the applicant to submit the results of the examination to the Associate Director for OE.

(b) Applications for approval submitted under paragraph (a) of this section, must be submitted to the Associate Director for Operations and Enforcement, Materials Transportation Bureau, Washington, D.C. 20590.

(c) Any applicant for an approval aggrieved by an action taken by the Associate Director for OE, under this subpart may file an appeal with the Director, MTB within 30 days of service of notification of a denial.

PART 173—SHIPPERS—GENERAL REQUIREMENTS FOR SHIPMENTS AND PACKAGINGS

2. In § 173.28 paragraph (h)(1) is deleted:

§ 173.28 Reuse of containers.

* * * * *

(h) * * *

(1) [Deleted]

* * * * *

3. In § 173.31 paragraph (d)(4) Table footnote [1] is revised to read:

§ 173.31 Qualification, maintenance, and use of tank cars.

* * * * *

(d) * * *

(4) * * *

[1] Tanks and safety relief devices in hydrocyanic acid service must be retested and inspected by a written procedure filed with and approved by the Associate Director for OE.

* * * * *

4. In § 173.32 paragraph (b)(3) is revised to read:

§ 173.32 Qualification, maintenance, and use of portable tanks.

* * * * *

(b) * * *

(3) Tanks having capacities of between 750 pounds and 1,000 pounds of water shall be considered as portable tank containers for the purposes of this part. In lieu of using safety relief valves on such containers they may be

equipped with fusible plugs only when the container is filled by weight. Size, number, and location, as well as character and physical properties of fusible plugs shall be examined by the Bureau of Explosives and approved by the Associate Director for OE. These containers shall be marked "DOT Specification 51S."

* * * * *

5. In § 173.34 paragraphs (e)(3)(i), introductory text of paragraph (g)(4)(ii), the introductory text of paragraph (i), paragraph (i)(4)(i), and the introductory text of paragraph (l) are revised to read:

§ 173.34 Qualification, maintenance and use of cylinders.

* * * * *

(e) * * *

(3) * * *

(i) Marked service pressure may be changed only upon application to the Associate Director for OE and receipt of written instructions as to the procedure to be followed. Such a change is not authorized for a cylinder which has failed to pass the prescribed periodic hydrostatic retest unless it is reheat treated and requalified in accordance with the requirements of this section.

* * * * *

(g) * * *

(4) * * *

(ii) The permanent expansion shall not be less than 3 percent nor more than 10 percent of the total expansion in the hydrostatic retest, in which case the flattening and physical tests are not required. For this alternative method the hydrostatic retest pressure may not exceed 115 percent of the minimum prescribed test pressure except with specific approval of the Associate Director for OE.

* * * * *

(i) *Repair by welding or brazing of DOT–4 series and DOT–8, welded or brazed cylinders.* Repairs on DOT–4 series and DOT–8 series welded or brazed cylinders are authorized to be made by welding or brazing. Such repairs must be made by a manufacturer of these types of DOT cylinders or by a repair facility approved by the Associate Director for OE and by a process similar to that used in its manufacture and under the following specific requirements:

* * * * *

(4) * * *

(i) Must be done by a manufacturer o these types of DOT cylinders or by a repair facility approved by the Associate Director for OE.

* * * * *

(l) *Rebuilding of DOT–4 series and DOT–8, welded or brazed cylinders.* Rebuilding of DOT–4 series and DOT–8 series, welded or brazed cylinders is authorized. Such rebuilding must be done by a manufacturer of these types of DOT cylinders or by a repair facility approved by the Associate Director for OE and by a process similar to that used in its original manufacture and under the following specific requirements:

* * * * *

6. In § 173.53 paragraphs (h), (h)(1), and (j) are revised to read:

§ 173.53 Definition of Class A explosives.

* * * * *

(h) *Type 8.* Any solid or liquid compound, mixture or device which is not specifically included in any of the above types, and which under special conditions may be so designated and examined by the Bureau of Explosives and approved by the Associate Director for OE. Example: Shape charges, commercial.

(1) A shaped charge, commercial, consists of a plastic, paper, or other suitable container comprising a charge of not to exceed 8 ounces of a high explosive containing no liquid explosive ingredient and with a hollowed out portion (cavity) lined with a rigid material. Detonators or other initiating elements may not be assembled in the device unless examined by the Bureau of Explosives and approved by the Associate Director for OE.

* * * * *

(j) *Ammunition for cannon with projectiles.* Ammunition for cannon with explosive projectiles, gas projectiles, smoke projectiles, incendiary projectiles, illuminating projectiles, or shell is fixed ammunition assembled in a unit consisting of the cartridge case containing the propelling charge and primer, and the projectiles, or shell, fuzed or unfuzed. Detonating fuzes, tracer fuzes, explosive or ignition devices, or fuze parts with explosives contained therein may not be assembled in ammunition or included in the same outside package unless shipped by or for the Department of Defense (DOD) and in accordance with established practices and procedures specified by DOD.

* * * * *

7. In § 173.56 paragraphs (a), (c), and (d) are revised to read:

§ 173.56 Ammunition, projectiles, grenades, bombs, mines, gas mines, and torpedoes.

(a) Detonating fuzes, tracer fuzes, explosive or ignition devices, bouchons, or fuze parts with explosives contained therein, must not be assembled in explosive projectiles, grenades, explosive bombs, explosive mines, or explosive torpedoes, or included in the same outside package with them unless shipped by or for the Department of Defense (DOD) and in accordance with established practices and procedures specified by DOD.

* * * * *

(c) The following explosives may be shipped without being boxed when shipped by or for the Department of Defense (DOD) and in accordance with established practices and procedures specified by DOD.

(1) Explosive projectiles, explosive torpedoes, explosive mines, or explosive bombs, exceeding 90 pounds in weight, and explosive projectiles of not less than 4½ inches when palletized.

(2) Explosive projectiles less than 4½ inches when palletized.

(d) Gas projectiles, smoke projectiles, incendiary projectiles, illuminating projectiles, gas bombs, smoke bombs, incendiary bombs, gas grenades, smoke grenades, incendiary grenades, and gas mines, explosive, containing a burster charge must be packed and properly secured in strong wooden boxes. Detonating fuzes, boosters or burster bouchons or ignition elements may not be assembled in these articles or included in the same package with them unless shipped by or for the Department of Defense (DOD) and in accordance with established practices and procedures specified by DOD.

* * * * *

8. In § 173.57 paragraph (a) is revised to read:

§ 173.57 Rocket ammunition.

(a) Rocket ammunition with explosive projectiles, gas projectiles, smoke projectiles, incendiary projectiles, or illuminating projectiles, must be well packed and properly secured in strong wooden, metal, reformed fiber glass resin impregnated container, or other packagings or approved military specifications which comply with § 173.7(a).

* * * * *

9. In § 173.65 the introductory text of paragraph (h) is revised to read:

§ 173.65 High explosives with no liquid explosive ingredient nor any chlorate.

* * * * *

(h) Shaped charges, commercial, having exposed lined conical cavities must have such cavities effectively filled. Those having conical cavities are covered shall be paired together with the cavities facing each other and with one or more pairs in a fiber tube, or

arranged that the conical cavities of the shaped charges at the ends of the column face toward the center of the tube. The shaped charges in the fiber tubes must fit snugly with no excess space and the fiber tubes containing the shaped charges must be packed snugly with no excess space in the outside container. Other methods of packaging for devices of which shaped charges are a component part may be employed when examined by the Bureau of Explosives and approved by the Associate Director for OE. Shaped charges, commercial, must be packed in specification containers as follows:

* * * * *

10. In § 173.79 paragraphs (a)(2) and (c) are revised to read:

§ 173.79 Jet thrust units (jato), class A explosives; rocket motors, class A explosives; igniters, jet thrust (jato), class A explosives; and starter cartridges, rocket motor, class A explosives.

(a) * * *

(2) Wooden boxes, wooden crates, or other packagings of approved military specifications which comply with § 173.7(a).

* * * * *

(c) Jet thrust units, Class A explosives; rocket motors, Class A explosives, may be packed with the same outside packaging with their separately packaged igniters (or igniter components), Class A, B, or C explosives, when shipped by or for the Department of Defense (DOD) and in accordance with established practices and procedures specified by DOD.

* * * * *

11. In § 173.88 paragraph (b) is revised as follows:

§ 173.88 New explosives; definitions; approval and notification.

* * * * *

(b) No person may offer a new explosive for transportation, unless it has been examined by the Bureau of Explosives and tested and approved by the Associate Director for OE or examined, classed, and approved by one of the following agencies:

(1) U.S. Department of Energy (DOE) for new explosives made by, or under the direction or supervision of DOE when tested in accordance with the Explosives Hazardous Classification procedures contained in DOT TB 700-2 (May 19, 1967); or

(2) U.S. Army Material Development and Readiness Command (DRCSF), Naval Sea Systems Command (NAVSEA 0411), or HQUSAF (IGD)/SEV) for new explosives made by, or under the direction or supervision of the Department of Defense when tested in accordance with Explosives Hazard Classification procedures contained in DOD TB 700-2 (May 19, 1967). (NAVSEAINST 8020.8 AFTO 11A-1-47, DSAR 8220.1).

* * * * *

12. In § 173.88 paragraph (g) is revised to read:

§ 173.88 Definition of class B explosives.

* * * * *

(g) Explosives power devices, Class B, are devices designed to operate ejecting apparatus or other mechanisms by means of a propellant explosive, Class B, and differ from explosive power devices, Class C, in that they contain larger or more powerful propellants. The devices must not rupture on functioning and must be of a type examined by the Bureau of Explosives and approved by the Associate Director for OE, except as otherwise provided in § 173.51(a)(18) and § 173.86(a).

* * * * *

13. In § 173.92 paragraphs (a)(4) and (c) are revised to read:

§ 173.92 Jet thrust units (jato), class B explosives; rocket motors, class B explosives; igniters, jet thrust (jato), class B explosives; igniters, rocket motors, class B explosives; and starter cartridges, jet engine, class B explosives.

(a) * * *

(4) Wooden boxes, wooden crates, or other packagings of approved military specification which comply with § 173.7(a).

* * * * *

(c) Jet thrust units, Class B explosives, or rocket motors, Class B explosives, may be packaged in the same outside packaging with their separately packaged igniters (or igniter components), Class A, B, or C explosives, only when shipped by or for the Department of Defense (DOD) and in accordance with established practices and procedures specified by DOD.

* * * * *

14. In § 173.94 the introductory text of paragraph (a) and paragraph (b) are revised to read:

§ 173.94 Explosive power devices, class B.

(a) Explosive power devices, Class B may not be shipped with igniters assembled therein unless shipped by or for the Department of Defense (DOD) and in accordance with established practices and procedures specified by DOD. Explosive power devices, Class B, must be packed in outside containers complying with the following specifications:

* * * * *

(b) Explosive power devices, Class B packed in any other manner must be in containers of a type examined by the Bureau of Explosives and approved by the Associate Director for OE.

* * * * *

15. In § 173.95 paragraphs (a)(2), (b) and (c) are revised to read:

§ 173.95 Rocket engines (liquid), class B explosives.

(a) * * *

(2) Wooden boxes or metal packagings of approved military specification which comply with § 173.7(a).

(b) Rocket engines (liquid), Class B explosives, may not be shipped with igniters or igniters assembled therein unless shipped by or for the Department of Defense (DOD) and in accordance with established practices and procedures specified by DOD.

(c) Rocket engines (liquid), Class B explosives, may be packed in the same outside packaging with their separately packaged igniters, jet thrust, Class B explosives when shipped by or for the Department of Defense (DOD) and in accordance with established practices and procedures specified by DOD.

* * * * *

16. In § 173.100 paragraph (p), the sixth sentence of the introductory text paragraph (r), paragraphs (r)(11), and (s), the introductory text of paragraph (x), paragraphs (y) [and] and (ee) are revised to read:

§ 173.100 Definition of class C explosives.

* * * * *

(p) Toy plastic or paper caps for toy pistols in sheets, strips, rolls, or individual caps, must not contain more than an average of twenty-five hundredths of a grain of explosive composition per cap and must be packed in inside packages constructed of cardboard not less than 0.013-inch in thickness, metal not less than 0.008-inch in thickness, noncombustible plastic not less than 0.015-inch in thickness, or a composite blister package consisting of cardboard not less than 0.013-inch in thickness and noncombustible plastic not less than 0.005-inch in thickness, which shall provide a complete enclosure and the minimum dimensions of each side or end of such package shall be not less than ⅛-inch in height. The number of caps in these inside packages shall be limited so that not more than 10 grams of explosives composition shall be packed into one cubic inch of space and not exceeding 17.5 grains of the explosive composition of toy caps shall be packed in any inside container. These inner containers must be packed in outside containers as

specified in § 173.109.

* * * * *

(r) * * *. Any new device, not enumerated in this paragraph, must be examined by the Bureau of Explosives and approved by the Associate Director for OE, before being offered for transportation as Common Fireworks. * * *.

* * * * *

(11) Novelties consisting of two or more devices enumerated in this paragraph when examined by the Bureau of Explosives and approved by the Associate Director for OE.

* * * * *

(u) Toy propellant devices and toy smoke devices consist of small paper or composition tubes or containers containing a small charge of slow burning propellant powder or smoke producing powder. These devices must be so designed that they will neither burst nor produce external flame on functioning.

Ignition elements, if attached, must be of a design examined by the Bureau of Explosives and approved by the Associate Director for OE.

* * * * *

(x) Cigarette loads, trick matches, and trick noise makers, explosive, must be of type examined by the Bureau of Explosives and approved by the Associate Director for OE and are described as follows:

* * * * *

(y) Smoke candles, smokepots, smoke grenades, smoke signals, signal flares, hand signal devices, and very signal cartridges are devices designed to produce visible effects for signal purposes. These devices must contain no bursting charges and no more than 200 grams of pyrotechnic composition each (see Note 1), exclusive of smoke composition (see Note 2), unless greater weight of composition is examined by the Bureau of Explosives and approved by the Associate Director for OE.

* * * * *

(aa) Explosive power devices, Class C, are devices designed to drive generators or mechanical apparatus by means of propellant explosives, Class B. The devices consist of a housing with a contained propellant charge and an electric igniter or squib. The devices must be of a type examined by the Bureau of Explosives and approved by the Associate Director for OE for this classification.

* * * * *

(ee) Starter cartridges, jet engine, Class C, consist of a metal, plastic, and/or rubber case, each containing a pressed cylindrical block of flammable solid material and having in the top of the case a small compartment that encloses an electric squib, small amount of black powder, and/or smokeless powder which constitute an igniter. The starter cartridge is used to activate a mechanical starter for jet engines and must be of a type examined by the Bureau of Explosives and approved by the Associate Director for OE, except as provided in § 173.51(a)(16) and § 173.86(a).

* * * * *

17. In § 173.102 paragraph (a)(2) is revised to read:

§ 173.102 Explosive cable cutters; explosive power devices, class C; explosive release devices, or starter cartridges, jet engine, class C explosives.

(a) * * *

(2) In addition to specification containers prescribed in this section, explosive cable cutters, explosive power devices, Class C, explosive release devices, or starter cartridges, jet engines, Class C may be shipped in strong wooden or metal boxes. Starter cartridges, jet engine, must have igniter wires short-circuited when packed for shipment.

* * * * *

18. In § 173.120 paragraph (c) is revised to read:

§ 173.120 Automobiles, motorcycles, tractors, or other self-propelled vehicles.

* * * * *

(c) *Truck bodies or trailers on flat cars.* Truck bodies or trailers with automatic heating or refrigerating equipment of the flammable liquid type may be shipped with fuel tanks filled and equipment operating or inoperative, when used for the transportation of other freight and loaded on flat cars as part of a joint rail highway movement, provided the equipment and fuel supply are of a type examined by the Bureau of Explosives and approved by the Associate Director for OE. The heating or refrigerating equipment is considered as carriers' equipment and is not subject to any other requirements of this subchapter.

* * * * *

19. In § 173.124 paragraphs (a)(1) and (a)(2) are revised to read:

§ 173.124 Ethylene oxide.

(a) * * *

(1) Specification 15A, 15B, 15C, or 16A (§§ 178.168, 178.169, 178.170, 178.185 of this subchapter) wooden boxes and Spec. 12B (§ 178.205 of this subchapter) fiberboard boxes with metal inside containers not over 12-ounce capacity each. Each inside container must have a minimum bursting strength of 180 psig as prepared for shipment and be provide with a safety vent having a minimum diameter of 0.1023 inch and closed with fusible metal having a yield temperature of 157 to 170°F. The safety vent opening shall be hot tinned before filling with fusible metal. Filling shall be such that the container will not be liquid full below 185°F. Each inside container must be completely insulated, except for top closure, with two coats of heat-retardant paint, of a type examined by the Bureau of Explosives and approved by the Associate Director for OE, applied over suitable primer and finished with suitable waterproof paint, or with other equally efficient insulation examined by the Bureau of Explosives and approved by the Associate Director for OE. Not more than 12 inside containers nor more than one layer of containers may be packed in one outside container.

(2) Cylinders as prescribed for any compressed gas, except acetylene, not exceeding 30 gallons nominal water capacity, which meet the following requirements: All cylinders must be seamless or steel welded. Cylinders must be equipped with safety devices of the fusible plug type with threaded straight bore orifice, with yield temperature of 157° to 170°F. having a minimum vent area of 0.0055 square in per pound of water capacity of the container for containers not over 1-gallon capacity and 0.0012 square inch per pound of water capacity of the container for all containers over 1-gallon capacity. Each cylinder must be tested for leakage at a pressure of at least 15 psig with an inert gas before each refilling. Filling must be such that the container will not be liquid full at 185°F. Pressurizing valves must be provided for all containers over 1-gallon capacity. Eductor tubes must be provided for all containers over 5-gallon capacity. Cylinders having a water capacity in excess of 1 gallon must be insulated with at least three coats of heat-retardant paint, of a type examined by the Bureau of Explosives and approved by the Associate Director for OE, applied over suitable primer and finished with suitable waterproof paint; or with other equally efficient insulation examined by the Bureau of Explosives and approved by the Associate Director for OE.

* * * * *

20. In § 173.162 paragraph (h) is revised to read:

§ 173.162 Charcoal.

* * * * *

(h) Charcoal, screenings or ground, crushed, granulated or pulverized charcoal, in bags, when loaded in cars for shipment by rail must be so loaded

that the bags are laid horizontally in the car, and so piled that there will be spaces for efficient air circulation. These spaces must be not less than 4 inches wide. If the bags are not compactly filled and closed so as to avoid free space within, transverse wooden strips must be laid between the bags and extending the full width of the car; these strips should be approximately 2 feet apart vertically and longitudinally. The bags must not be piled closer than 6 inches from the top of the car, and no more than 26,000 pounds of screenings, ground, granulated, crushed, or pulverized charcoal, shall be loaded in a 36-foot, 6-inch car; 27,000 pounds in a 37-foot, 6-inch car; 28,000 pounds in a 38-foot, 6-inch car; 29,000 pounds in a 39-foot, 6-inch car; 36,000 pounds in a 40-foot, 6-inch car; and 40,000 pounds in a 50-foot, 6-inch car. A tight car must be used, and any loose material must be swept up and removed from the doorway of the car before completing the loading.

* * * * *

21. § 173.197a is revised to read:

§ 173.197a Smokeless powder for small arms.

Smokeless powder for small arms in quantities not exceeding 100 pounds net weight transported in one car or motor vehicle may be classed as a flammable solid when examined for this classification by the Bureau of Explosives and approved by the Associate Director for OE. Maximum quantity in any inside packaging must not exceed 8 pounds and inside packagings must be arranged and protected to prevent simultaneous ignition of the contents. The complete package must be a type examined by the Bureau of Explosives and approved by the Associate Director for OE. Each outside package must bear a flammable solid label.

22. In § 173.202 paragraph (a)(1) is revised to read:

§ 173.202 Sodium metal liquid alloy, potassium metal liquid alloy, and sodium potassium liquid alloy.

(a) * * *

(1) Specification 15A or 15B (§§ 178.168, 178.169 of this subchapter). Wooden boxes with inside metal containers of a type examined by the Bureau of Explosives and approved by the Associate Director for OE. Inside containers must be cushioned with combustible cushioning material. Each container must have been tested hydrostatically to a pressure of not less than 60 pounds per square inch. Closing devices must be protected from injury. Not more than 300 pounds of sodium or potassium liquid alloy may be shipped in one outside container.

* * * * *

23. In § 173.218 paragraph (a)(1) is revised to read:

§ 173.218 Isopropyl percarbonate, unstabilized.

(a) * * *

(1) Specification 15A, 15B, 15C, 16A, or 19A (§§ 178.168, 178.169, 178.170, 178.185, 178.190 of this subchapter). Wooden boxes, with glass, metal, or earthenware inside containers of not over 2 gallons capacity each which must be maintained at a temperature below 0°F. Shipments are authorized for transportation by private or contract carrier by motor vehicle only.

24. In § 173.225 paragraph (a)(1) is revised to read:

§ 173.225 Phosphorus trisulfide; phosphorus sesquisulfide; phosphorus heptasulfide, and phosphorus pentasulfide.

(a) * * *

(1) Specification 15A or 15B (§§ 178.168, 178.169 of this subchapter). Wooden boxes with metal inside containers hermetically sealed (soldered) or watertight metal cans with screw-top closures.

* * * * *

25. In § 173.237 paragraph (a)(2) is deleted.

§ 173.237 Chlorine dioxide hydrate, frozen; chloric acid.

(a) * * *

(2) [Deleted]

26. In § 173.238 paragraph (a), is revised to read:

§ 173.238 Aircraft rocket engines (commercial) and/or aircraft rocket engine igniters (commercial).

(a) Aircraft rocket engines (commercial) and their igniters may be offered for transportation when of a type examined by the Bureau of Explosives and approved by the Associate Director for OE to be so described and classed, and when packaged as follows:

(1) Specification 15A, 15B, 15E or 16A (§§ 178.168, 178.169, 178.172, 178.185 of this subchapter). Wooden boxes. Igniters must be packaged in sealed metal containers examined by the Bureau of Explosives and approved by the Associate Director for OE and packed in wooden boxes as specified above when shipped separately from the aircraft rocket engines.

(2) Aircraft rocket engines (commercial), when examined by the Bureau of Explosives and approved by the Associate Director for OE may be packed in the same outside shipping container with their separately packaged igniters. Igniters must be packed in separate sealed metal containers in strong inside containers.

(3) Aircraft rocket engines (commercial) and/or their igniters, packed in any other manner than specified in paragraphs (a) (1) and (2) of this section, must be in containers of a type examined by the Bureau of Explosives and approved by the Associate Director for OE.

* * * * *

27. In § 173.245 paragraph (a)(25) is revised to read:

§ 173.245 Corrosive liquids not specifically provided for.

(a) * * *

(25) Specification 12A or 12B (§§ 178.210, 178.205 of this subchapter). Fiberboard boxes with inside aluminum containers. Aluminum containers must be examined by the Bureau of Explosives and approved by the Associate Director for OE.

* * * * *

28. In § 173.252 paragraph (g)(1) is revised to read:

§ 173.252 Bromine.

* * * * *

(g) * * *

(1) Specification 5K or 5M (§§ 178.88, 178.90 of this subchapter). Specification 5K nickel drums of not over 10 gallons capacity each and containing not more than 225 pounds net weight of bromine or Specification 5M monel drums of not over 25 gallons capacity each and containing not more than 600 pounds net weight of bromine. Drums must be of metal at least 14-gauge United States standard throughout and must have chime reinforcement adequate for their protection. All openings must be in one head and closing parts (plug, cap, flange, etc.) must be of the same metal as the drum. One opening not over 2.3 inches in diameter and one opening not over ¾-inch standard pipe size are permitted. Each drum must be completely emptied and dried before reuse and must be equipped with gaskets of a material examined by the Bureau of Explosives and approved by the Associate Director for OE.

* * * * *

29. In § 173.256 paragraph (a)(3) is revised to read:

§ 173.256 Compounds, cleaning, liquid.

(a) * * *

(3) Specification 22B (§ 178.197 of this subchapter). Plywood drums equipped with molded liner of a type and material examined by the Bureau of Explosives and approved by the Associate Director for OE.

* * * * *

30. In § 173.260 paragraph (g) is revised to read:

§ 173.260 Electric storage batteries, wet.

* * * * *

(g) Electric storage batteries, containing electrolyte or corrosive battery fluid in a coil from which it is injected into the battery cells by a gas generator and initiator assembled with the battery, and which are nonspillable and leakproof, are excepted from Parts 170–189 of this title when examined by the Bureau of Explosives and approved by the Associate Director for OE.

31. In § 173.266 paragraph (f)(2) is revised to read:

§ 173.266 Hydrogen peroxide solution in water.

* * * * *

(f) * * *

(2) Specification MC 310 or MC 312 (§ 178.343 of this subchapter). Tank motor vehicles. Tanks shall be welded construction of aluminum complying with Aluminum Association Nos. 1060, 1260, 5254, or [illegible] and having a minimum wall thickness of one-half inch. They must be built to a design working pressure of not less than 40 psig and shall be designed so that internal surfaces may be effectively cleaned and passivated. All openings in the tank shall be located on top of tank. All valves and safety devices shall be provided with overturn protection and dust covers. The tank metal identification plate required shall be marked "DOT MC 310-[illegible]" or "DOT MC 312-[illegible]" as appropriate, and in addition, the vehicle shall be clearly marked in letters not less than one inch high "FOR HYDROGEN PEROXIDE ONLY." Designs for venting and pressure relief devices must be examined by the Bureau of Explosives and approved by the Associate Director for OE.

32. In § 173.268 paragraph (f)(4) is revised to read:

§ 173.268 Nitric acid.

* * * * *

(f) * * *

(4) Cushioning for carboys must be incombustible mineral material, elastic wooden strips, natural cork blocks or rubber blocks. The use of hay, excelsior, loose ground cork, or similar materials, whether treated or untreated, is prohibited.

* * * * *

33. In § 173.269 paragraph (b) is revised to read:

§ § 173.269 Perchloric acid.

* * * * *

(b) Cushioning for carboys must be incombustible mineral material, elastic wooden strips, natural cork blocks or rubber blocks. The use of hay, excelsior, loose ground cork, or similar materials, whether treated or untreated, is prohibited.

* * * * *

34. In § 173.272 paragraph (i)(18) is revised to read:

§ 173.272 Sulfuric acid.

* * * * *

(i) * * *

(18) Specification 17F (§ 178.117 of this subchapter). Metal barrels or drums (single-trip only). Drums equipped with vented closures of an experimental type examined by the Bureau of Explosives and approved by the Associate Director for OE are also authorized for export shipments. Authorized for sulfuric acid of 77.5 percent to 96 percent concentrations with or without an inhibitor, provided such acid has a corrosive effect on steel not greater than 93.2 percent sulfuric acid measured at 100°F.

* * * * *

35. In § 173.300 paragraph (b)(1) is revised to read:

§ 173.300 Definitions.

* * * * *

(b) * * *

(1) Either a mixture of 13 percent or less (by volume) with air forms a flammable mixture or the flammable range with air is wider than 12 percent regardless of the lower limit. These limits shall be determined at atmospheric temperature and pressure. The method of sampling and test procedure shall be acceptable to the Bureau of Explosives and approved by the Associate Director for OHM.

* * * * *

36. In § 173.305 paragraph (c)(1) is revised to read:

§ 173.305 Charging of cylinders with a mixture of compressed gas and other material.

* * * * *

(c) * * *

(1) Specification 2P (§ 178.33 of this subchapter). Inside metal containers equipped with safety relief devices of a type examined by the Bureau of Explosives and approved by the Associate Director for OE, and packed in strong wooden or fiber boxes of such design as to protect valves from injury or accidental functioning under conditions incident to transportation. Pressure in the container may not exceed 85 psia at 70°F. Each completed metal container filled for shipment must be heated until content reaches a minimum temperature of 130°F., without evidence of leakage, distortion or other defect. Each outside shipping container must be plainly marked "INSIDE CONTAINERS COMPLY WITH PRESCRIBED SPECIFICATIONS."

* * * * *

37. In § 173.306 paragraph (d)(1) is revised to read:

§ 173.306 Limited quantities of compressed gases.

* * * * *

(d) * * *

(1) Truck bodies or trailers with automatic heating or refrigerating equipment of the gas burning type may be shipped with fuel tanks filled and equipment operating or inoperative, when used for the transportation of other freight and loaded on flat cars as part of a joint rail-highway movement, provided the equipment and fuel supply are of a type examined by the Bureau of Explosives and approved by the Associate Director for OE. The heating or refrigerating equipment is considered as carriers' equipment and is not subject to any other requirements of this subchapter.

* * * * *

38. In § 173.315 paragraph (i)(12) is revised to read:

§ 173.315 Compressed gases in cargo tanks and portable tank containers.

* * * * *

(i) * * *

(12) Subject to conditions of [illegible] for the methyl [illegible] sulfur dioxide optional [illegible] tanks, one or more fusible plugs examined by the Bureau of Explosives and approved by the Associate Director for OE may be used on these tanks in place of safety relief valves of the spring-loaded type. The fusible plug or plugs must be in accordance with CGA Pamphlet S-1.2, to prevent a pressure rise in the tank of more than 120 percent of the design pressure. If the tank is over 30 inches long, each end must have the total specified safety discharge area.

* * * * *

39. In § 173.332 paragraph (d) is revised to read:

§ 173.332 Hydrocyanic acid, liquid (prussic acid) and hydrocyanic acid, liquefied.

* * * * *

(d) Specification 105A500W or 105A600W (§§ 179.100 and 179.101 of this subchapter). Tank cars. Tank must be restenciled 105A300W and be equipped with safety valves of the type and size used on Spec. 105A300W

(§§ 179.100 and 179.101 of this subchapter). Tank car tank must be equipped with approved dome fittings and safety devices, and with cork insulation at least 4 inches in thickness. Each tank car must be marked "HYDROCYANIC ACID" in accordance with the requirements of § 172.330 of this subchapter. Written procedures covering details of tank car appurtenances, dome fittings and safety devices, and marking, loading, handling, inspection, and testing practices shall be examined by the Bureau of Explosives and approved by the Associate Director for OE before any tank car is offered for transportation of hydrocyanic acid. The maximum permitted filling density is 63 percent of the water capacity of the tank.

40. In § 173.333 paragraph (a)(2) is revised to read:

§ 173.333 Phosgene or diphosgene.

(a) * * *

(2) Specification 106A500X (§§ 179.300, 179.301 of this subchapter) tanks. Authorized only for phosgene. Tanks must not be equipped with safety devices of any type. Outage must be sufficient to prevent tanks from becoming liquid full at 130°F. (55°C.) Additional requirements are prescribed for rail shipments under § 174.280 of this subchapter, and for highway shipments under § 177.834(m) of this subchapter.

* * * * *

41. In § 173.336 paragraphs (a)[illegible] and (a)[illegible] are revised to read:

§ 173.336 Nitrogen dioxide, liquid, nitrogen peroxide, liquid, and nitrogen tetroxide, liquid.

(a) * * *

(2) Specification 106A500X or 110A500W (§§ 179.300, 179.301 of this subchapter) tanks. Each tank must be equipped with gas tight valve protection caps. Tanks must not be equipped with safety devices of any type. Outage must be sufficient to prevent tanks from becoming liquid full at 130°F (55°C). (See §§ [illegible] and 177.834[illegible] of this subchapter for special requirements for rail and highway shipments). Specification 110A500W tanks must be stainless steel.

(4) Specification 105A500W (§§ 179.100, 179.101 of this subchapter) tanks [illegible] for nitrogen tetroxide only. Tanks must be lagged with not less than a four inch thickness of cork. All valves and fittings must be protected by a securely attached cover made of metal not subject to deterioration by the lading, and all valve openings, except the safety valve, must be fitted with screw plugs or caps to prevent leakage in the event of valve failure. Safety valve must be equipped with an approved stainless steel or platinum frangible disc. Each tank car must be marked "NITROGEN TETROXIDE" in accordance with the requirements of § 172.330 of this subchapter. Written procedures covering details of tank car appurtenances, dome fittings and safety devices, and marking, loading, handling, inspection and testing practices, must be examined by the Bureau of Explosives and approved by the Associate Director for OE before any tank car is offered for transportation of nitrogen tetroxide.

42. In § 173.366 paragraph (a)(3) is revised to read:

§ 173.366 Arsenic (arsenic trioxide) or arsenic acid (solid).

(a) * * *

(3) In addition to specification containers prescribed in this section, arsenic (arsenic trioxide) or arsenic acid (solid) may be shipped when packed in collapsible, rubber containers, not over 70 cubic feet capacity, of a type examined by the Bureau of Explosives and approved by the Associate Director for OE. Authorized for carload, truckload or freight container shipments only.

* * * * *

43. In § 173.370 paragraph (a)(13) is revised to read:

§ 173.370 Cyanides and cyanide mixtures, dry.

(a) * * *

(13) Bulk in strong, water-tight, metal portable containers of not over 70 cubic feet capacity each and approved by the Associate Director for OE.

* * * * *

44. In § 173.385 paragraph (b) and (c) are revised to read:

§ 173.385 Tear gas grenades, tear gas candles, or similar devices.

* * * * *

(b) These articles may not be assembled with or packed in the same compartment with mechanically or manually operated firing, igniting, bursting, or other functioning elements, unless of a type or design examined by the Bureau of Explosives and approved by the Associate Director for OE.

(c) No shipment of packages containing articles under this section may be made until samples thereof have been examined by the Bureau of Explosives, or examined under their supervision, and approved by the Associate Director for OE.

* * * * *

PART 174—CARRIAGE BY RAIL

45. In § 174.61 paragraph (b) is revised to read:

§ 174.61 Truck bodies, trailers or freight containers on flatcars.

* * * * *

(b) A truck body, trailer or freight container equipped with automatic heating or refrigerating equipment employing any fuel or article classed as a hazardous material may be loaded and transported on a flatcar if the equipment is of type examined by the Bureau of Explosives and approved by the Associate Director for OE. The truck body, trailer or freight container must be secured on the flatcar so that it cannot change position during transit.

46. In § 174.81 Note 5 of the table is revised to read:

§ 174.81 Segregation and separation requirements for hazardous materials in rail cars.

(a) * * *

Note 5.—Smokeless powder for small arms in quantities not exceeding 100 pounds net weight in one car shall be classed as a flammable solid for purposes of transportation when examined for this classification by the Bureau of Explosives and approved by the Associate Director for OE.

PART 177—CARRIAGE BY PUBLIC HIGHWAY

47. In § 177.821 paragraph (f) is revised to read:

§ 177.821 Hazardous materials forbidden or limited for transportation.

* * * * *

(f) Smokeless powder for small arms in quantities not exceeding 100 pounds net weight transported in one car or motor vehicle may be classed as a flammable solid when examined for this classification by the Bureau of Explosives and approved by the Associate Director for OE. Maximum quantity in any inside packaging must not exceed 8 pounds and inside packagings must be arranged and protected to prevent simultaneous ignition of the contents. The complete package must be a type examined by the Bureau of Explosives and approved by the Associate Director for OE. Each outside package must bear a flammable solid label.

48. In § 177.838 paragraph (g) is revised to read:

§ 177.838 Flammable solids and oxidizing materials.

* * * * *

(g) Smokeless powder for small arms in quantities not exceeding 100 pounds net weight transported in one car or motor vehicle may be classed as a flammable solid when examined for this

classification by the Bureau of Explosives and approved by the Associate Director for OE. Maximum quantity in any inside packaging must not exceed 8 pounds and inside packagings must be arranged and protected to prevent simultaneous ignition of the contents. The complete package must be a type examined by the Bureau of Explosives and approved by the Associate Director for OE. Each outside packaging must bear a flammable solid label.

49. In § 177.848 Note 5 of the table is revised to read:

§ 177.848 Loading and storage chart of hazardous materials

(a) * * *

Note 5.—Smokeless powder for small arms in quantities not exceeding 100 pounds net weight in one motor vehicle shall be classed as a flammable solid for purposes of transportation when examined for this classification by the Bureau of Explosives and approved by the Associate Director for OE.

* * * * *

Note.—The Materials Transportation Bureau has determined that this final rule will not result in a major economic impact under the terms of Executive Order 12044 and DOT implementing procedures (44 FR 11034) nor require an environmental impact statement under the National Environmental Policy Act (49 U.S.C. 4321 et seq.). A regulatory evaluation is available in the docket.

Issued in Washington, D.C., on May 7, 1980.

L. D. Santman,

Director, Materials Transportation Bureau.

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